### NND14514974Q

# Test Cell with Allison 250 Turbine Engine Questions and Responses (Updated August 1, 2014)

### Questions Submitted and the Responses (Posted on August 1, 2014)

1. Do you have a list of Government furnished items? e.g. Fuel, Allison 250 Turbo Engine, etc.?

There are no Government furnished items. The vendor will need to provide the test cell that includes the Allison 250 C18 turbo shaft engine and all accessories necessary to operate it. A test panel with an umbilical cord is required to be able to run the engine remotely.

2. Can you please provide a Bid Sheet of all items to be evaluated for this award?

No bid sheet is available. The specifications of the requirement are outlined in the Specification Requirements Document that was included with the solicitation.

3. Evaluation factors, is past performance a consideration?

Past performance is not an evaluation factor.

4. Evaluation factors, are you seeking the highest "technically qualified" vendor first and then awarding to the lowest price offeror?

As stated in the combined synopsis/solicitation, selection and award will be made to the lowest priced, technically acceptable offer. To be determined technically acceptable, the quoted item(s) must meet or exceed the Government's requirements, and comply with NPR 1800.1 Section 4.12 and NFS 1852.223-72. The referenced documents will be uploaded with these responses.

5. Evaluation factors, you have stated that "quality" is a factor of evaluation; how will this be evaluated?

The response to Question 1 posted on July 22, 2014 was answered incorrectly. That response should be deleted and replaced with the following response:

1. What are the evaluation factor(s) that are to be considered for award?

Selection and award will be made to the lowest priced, technically acceptable offer. To be determined technically acceptable, the quoted item(s) must meet or exceed the Government's requirements, and comply with the posted Quality Assurance Documents, NPR 1800.1 Section 4.12 and NFS 1852.223-72.

Accordingly, "quality" is NOT a factor of evaluation and will not be evaluated. The Government will be evaluating the technical acceptability of the quoted item(s) and select and award to the lowest priced, technically acceptable quote.

6. Will this solicitation be extended for an additional 15-Days or has a previous pre-solicitation notice been released previously?

Due dates for quotes has been extended to August 7, 2014. Pursuant to FAR 12.603, the streamlined solicitation for commercial items process is being used; no pre-solicitation notice is required.

#### Questions Submitted and the Responses (Posted on July 25, 2014)

1: The General Solicitation and Brand Name Justification verbiage states the engine is to be coupled to an electric motor-generator to test. It is assumed the purpose of this is to make sure the request includes an AC Regenerative engine dyno within the scope of supply of the test cell. However the Specification does not list that within the test cell bullets. Should the AC dynamometer supplied for full power loading of the Allison 250 C18 engine? Or is the "Test Cell" not including the "Test Stand" that it seems NASA Is re-using? If a load is needed but not specified, is a WaterBrake dyno applicable? Continuous rating of the required dyno – EG. 350HP at 6000RPM?

The solicitation is only for the test cell and does not require the vendor to put together a hybrid test stand with a motor generator and dyno as NASA will be reusing an existing test stand for the purposes of putting together the hybrid system. So the only requirements are that a self contained test stand that allows the Allison 250 turboshaft to be turned operated (on/off). There is no loading system or motor coupling design required for the vendor. Once NASA personnel are familiar operating with the turboshaft engine we will remove it from the test cell, along with the accessories, onto our own test stand and customize it ourselves for the hybrid configuration. The "test stand" wording in the solicitation is just the metal frame which the engine will be mounted on.

2: Is a Serviceable, Used Engine that meets Q-1A, proof of serviceability rating allowed or does the solicitation require a Brand New Engine? If a Used engine is allowed what percentage wear is allowed? (bullet 2 simply states operational/runnable state) Is the desired engine to have mechanical or electronic throttle control?

The Allison 250 C18 turboshaft engine does not need to be a new engine. As long as there is usable life and is operational/serviceable NASA will consider it. The preference is an electronic throttle control, but cost will be a factor and considering the age of these C18 we anticipate mechanical control will also be proposed by vendors. For standard control the Bendix control system is preferrable. Our expected use of this engine for ground testing only will be 300 hours maximum.

3: What fuel is to be used for the test cell fuel tank? Diesel or AV fuel?

AV fuel will be used for the fuel tank.

4: Is the test cell to be mounted indoors or outdoors at Dryden? What area is available for the test cell? Are there noise restrictions as measured outside the test cell walls during test? Is the control console to be mounted in the test cell control room – is an enclosed control room also a deliverable (30' umbilical is noted in #5)? Is a control room window to the test cell needed or closed circuit cameras to view the engine under test? Can power equipment be mounted outside the test cell?

The test cell will be used outdoors. We have a 20ft x 20 ft concrete pad with aircraft rated tie downs of 1000 lbf each. NASA personnel will be required to wear hearing protection when running the Allison 250 engine. We plan on locating the test control console either indoors within a NASA owned control room or outdoors in the open so an umbilical that can be disconnected from the test cell would work well for both scenarios. The vendor does not need to deliver a control room. Just an Allison 250 C18 engine that is mounted on a metal frame with all accessories, starter generator, fuel tank, and test control console to be able to operate it and throttle it. We will have closed circuit cameras.

5: What utilities are available for the test cell?

We have standard 120 VAC, 20 Amp service and NEMA L5-30 120VAC 30 Amp service. Av fuel is available. We will have fire extinguisher as well. The test cell will be operated outdoors.

6: What exhaust evacuation is considerations are needed (depending on where the test cell is to be mounted)?

The test cell will be used outside so no special exhaust evacuation is required. The intake should have some protective screen to prevent foreign object damage.

7: Are there test cell, dyno and engine spares required?

No. The dyno and engine spare is not required. Only a test cell that consists of a metal frame supporting the Allison engine, all accessories, fuel tank and starter generator to be able to operate it, and a remote test control console that has a 30' umbilical to the test cell to run the engine and throttle it up and down.

8: What is the expected delivery time after contract? 4 to 6 months after contract award.

## Questions Submitted and the Responses (Posted on July 22, 2014)

- What are the evaluation factor(s) that are to be considered for award?
   Meets technical requirement, price, quality, warranty. (Lowest priced, technically acceptable)
   Updated answer August 1, 2014:
   Selection and award will be made to the lowest priced, technically acceptable offer. To be determined technically acceptable, the quoted item(s) must meet or exceed the Government's requirements, and comply with the posted Quality Assurance Documents, NPR 1800.1 Section 4.12 and NFS 1852.223-72.
- 2. How many personnel will be in attendance for the training? Six people will be attending the training.

- 3. Is a presentation with our written proposal authorized?

  If it is a PowerPoint presentation then that is acceptable, if it is a verbal on site presentation that is not acceptable as it would be unfair to other competitors.
- 4. Request a site visit of existing NASA Test Cell previously mentioned in order to best fit your needs? Unfortunately a site visit to NASA is only granted after award.